

Claims

We claim:

1. A disc data reading apparatus, comprising:
a tray having a recess for receiving a disc, the recess defining a recess flange;
a housing including an upper plate parallel to the tray, the upper plate having a front flange; and
a cover including a first portion and a second portion, the first portion being connected to the front flange of the housing, and the second portion extending into the housing to form a barrier portion;
wherein the barrier portion prevents a possible cracked disc from jetting out.
2. The disc data reading apparatus of claim 1, wherein the barrier portion is located between the recess flange and the cover.
3. The disc data reading apparatus of claim 1, wherein the barrier portion and the tray prevent the cracked disc from jetting out through an opening between the barrier portion and the tray.
4. The disc data reading apparatus of claim 1, wherein the barrier portion further includes a guidance surface sloping at a predetermined angle to guide a movement of the cracked disc.
5. The disc data reading apparatus of claim 4, wherein the predetermined angle is less than 90 degrees.

6. The disc data reading apparatus of claim 1, wherein the upper plate further includes a bent portion downwardly extending from the upper plate.
7. The disc data reading apparatus of claim 6, wherein the bent portion is located between the recess flange and the front flange.
8. The disc data reading apparatus of claim 6, wherein the barrier portion further includes a clasp engaging with the bent portion.
9. The disc data reading apparatus of claim 8, wherein the clasp further includes a guidance surface sloping at a predetermined angle to guide a movement of the cracked disc and prevent the cracked disc from jetting out.
10. A disc data reading apparatus, comprising:
 - a tray having a recess for receiving a disc, the recess defining a recess flange;
 - a housing including an upper plate parallel to the tray, the upper plate having a front flange; and
 - a cover including a first portion and a second portion, the first portion being connected to the front flange of the housing, and the second portion extending into the housing to form a barrier portion;wherein the barrier portion has a guidance surface sloping at a predetermined angle to guide a movement of a possible cracked disc and prevent the cracked disc from jetting out.

11. The disc data reading apparatus of claim 10, wherein the barrier portion is located between the recess flange and the cover.
12. The disc data reading apparatus of claim 10, wherein the barrier portion and the tray prevent the cracked disc from jetting out through an opening between the barrier portion and the tray.
13. A disc data reading apparatus, comprising:
 - a tray having a recess for receiving a disc, the recess defining a recess flange;
 - a housing including an upper plate parallel to the tray, the upper plate having a bent portion and a front flange, the bent portion downwardly extending from the upper plate; and
 - a cover including a first portion and a second portion, the first portion being connected to the front flange of the housing, and the second portion extending into the housing to form a barrier portion, the barrier having a clasp engaging with the bent portion;wherein the clasp has a guidance surface sloping at a predetermined angle to guide a movement of a possible cracked disc.
14. The disc data reading apparatus of claim 13, wherein the barrier portion is located between the recess flange and the cover.
15. The disc data reading apparatus of claim 13, wherein the barrier portion and the tray prevent the cracked disc from jetting out through an opening between the barrier portion and the tray.

16. The disc data reading apparatus of claim 13, wherein the bent portion is located between the recess flange and the front flange.